# Rubric for 2006-2007 Title II, Part B Mathematics and Science Partnership Competitive Grant

**Incentive points:** Although not a federally mandated requirement for the grant, Arizona will award incentive points to proposals submitted by applicants who have not been previously funded by the MSP Program or from specific geographic areas in need of quality professional development in the area of mathematics or science. Up to 10 points can be added at the discretion of the review team based on the quality of the proposal.

### 1. Needs Assessment:

The needs assessment should indicate a clear statement of needs derived from multiple sources and/or multiple years.

Criteria	Exceeds Standard	Meets Standard	Below Standard
1a. Baseline data	8 points	6 points	0 points
	There is clear evidence of baseline	There is clear evidence of baseline	Limited baseline data is given. Needs
	data from 3 or more teacher and/or	data from 1-2 teacher and/or student	identified are not adequately
	student sources (i.e., norm-referenced	sources (i.e., norm-referenced	supported by evidence.
	assessments, AIMS results, district	assessments, AIMS results, district	
	benchmark assessments, college	benchmark assessments, college	
	transcripts) to support mathematics or	transcripts) to support mathematics or	
	science education needs of the school	science education needs of the school	
	population. If student data is	population. If student data is	
	available, it must be one of the	available, it must be one of the	
	sources.	sources.	
1b. Identification of professional	6 points	4 points	0 points
development needs	In addition to the criteria for "Meets	Provides information on the number	Vague or limited information is given
	Standard" the needs assessment also	of teachers not meeting Arizona's	about the number of appropriately
	includes a correlation between	definition of an appropriately certified	certified teacher status.
	appropriately certified teacher status	teacher status and/or the number of	
	and student achievement.	teachers lacking sufficient knowledge	
		to pass targeted areas of the middle	
		school content AEPA.	
1c. Prioritization of professional	4 points	3 points	0 points
development needs	There is clear evidence included that	Some evidence is provided to show	Limited or no evidence is given to
	partners have collectively determined	that the targeted professional	indicate why the partnership selected
	which professional development	development needs were selected with	the targeted professional development
	needs are of the highest priority and	input from project partners.	needs.
	will be addressed by the project.		

**2.** <u>Project Goals and Objectives:</u>
The project goals and objectives should be closely linked to the professional development needs of the teachers.

Criteria	<b>Exceeds Standard</b>	Meets Standard	Below Standard
2a. Description of the project's goals and objectives	8 points Goals are clear and objectives are	6 points Goals and objectives are well defined	<b>0 points</b> Objectives are poorly designed and/or
and objectives	specific, measurable, attainable, results oriented, time bound.	and measurable.	not measurable.
2b. Project is designed to achieve	8 points	6 points	0 points
goals and objectives	Goals and objectives are specifically	Goals and objectives are linked to the	Goals and objectives are poorly
	linked to the individual professional	professional development needs of the	correlated with the needs assessment.
	development needs of the teachers.	teachers.	

3. Research/Evidence Base and Efficacy of plan to increase student achievement:
The plan for professional development should be guided by research and the Arizona Academic and Professional Teaching Standards. The carefully designed activities should link to the goals and objectives of the plan with emphasis on content knowledge and

pedagogical content knowledge.

Criteria	Exceeds Standard	Meets Standard	Below Standard
3a. Connecting prior professional development efforts to proposed project	4 points Provides detailed description of prior efforts to improve teacher content knowledge and student achievement in mathematics or science, lessons learned	3 points Describes prior efforts to improve teacher content knowledge and student achievement and relates how this project will build on those efforts.	O points  Does not adequately address prior efforts to improve teacher content knowledge and student achievement and/or how this project will build on
3b. Activities are linked to goals and objectives of proposal	from these prior efforts, and how this project will build on those efforts.  8 points Provides specific and clear activities that link the goals and objectives stated in the project and the data provided by the needs assessment	6 points Evidence is provided that activities will lead to achievement of the goals and objectives.	those efforts.  O points  Little or no correlation is made between activities and achievement of the project's goals or objectives.
3c. Supporting research linking professional development strategies and increased student achievement in mathematics and science	10 points Clearly outlines how the professional development strategies are valid and reliable, based on cited evidence-based research and how the project will enable teachers to improve instruction and increase student academic achievement in mathematics or science.	7 points Includes clearly documented evidence-based research that the professional development strategies will improve instruction and increase student achievement in mathematics or science.	O points Proposal includes references but provides little evidence of research linking professional development strategies to increased student achievement in mathematics or science.
3d. Description and timeline of professional development activities	6 points Includes a clear and detailed description and timeline of all the professional development activities including the number, types, duration, intensity and responsible partner.	4 points Includes a general description and timeline of all the professional development activities including the number, types, duration, intensity and responsible partner.	O points Includes an incomplete description and/or timeline.

Criteria	Exceeds Standard	Meets Standard	Below Standard
3e. Planned activities are aligned	8 points	6 points	0 points
with Arizona Academic Standards	Includes a clear and detailed description of how the proposed professional development will incorporate the targeted Arizona Mathematics or Science Standards at the concept level.	Describes professional development that is aligned to Arizona Mathematics or Science Standards at the concept level.	Provides a limited description of how the professional development is aligned to Arizona Mathematics or Science Standards.
3f. Planned activities are aligned	4 points	3 points	0 points
with Arizona Professional Teaching Standards	Describes a detailed plan that clearly illustrates how the proposed professional development is aligned with Arizona Professional Teaching Standards, and provides for work-embedded application of new learning, continuous reflection, and ongoing support.	Describes how the proposed professional development is aligned with Arizona Professional Teaching Standards, and provides for workembedded application of new learning, continuous reflection, and ongoing support.	Does not provide sufficient evidence describing how the proposed professional development is aligned with Arizona Professional Teaching Standards, or does not provide for work-embedded application of new learning, continuous reflection, or ongoing support.
3g. Planned activities contain	10 points	7 points	0 points
rigor and challenging content and develop pedagogical content knowledge	Includes evidence that the professional development is rigorous and challenging in academic content and explicitly addresses knowledge of content and students and knowledge of content and teaching.	Includes evidence that the professional development is rigorous and challenging in academic content and also develops pedagogical content knowledge.	Provides limited evidence that the professional development is rigorous or challenging in academic content and/or focuses mainly on pedagogy.
3h. Design elements for planned	4 points	3 points	0 points
activities	Proposed plan is aligned to a professional development design that fully develops these 4 elements (see definitions section):  • Learn the content  • Reinforce the content learning  • Consolidate the learning  • Implement the content  Provides within sample plan, evidence that all four elements are addressed.	Proposed plan is aligned to a professional development design that includes these 4 elements (see definitions section):  • Learn the content • Reinforce the content learning • Consolidate the learning • Implement the content Provides within sample plan, evidence that all four elements are addressed	Proposed plan is aligned to a professional development design that is missing one or more of these 4 elements (see definitions section):  • Learn the content • Reinforce the learning • Consolidate the learning • Implement the content Or, sample plan does not provide evidence that all four elements are addressed.

## 4. Evaluation and Accountability Plan:\*

Identify evaluation methods that the project will use and explain why those methods are appropriate to the identified needs the proposal addresses. A proposal must make a compelling case for the activities of the project and describe how the activities will help the MSP program build a rigorous, cumulative, reproducible, and usable body of findings.

Criteria	Exceeds Standard	Meets Standard	Below Standard
4a. Design of evaluation plan is based	8 points	6 points	0 points
on quasi-experimental or	Describes a detailed evaluation plan	Describes a detailed evaluation plan	Describes an evaluation plan that is
experimental design	based on experimental design, with	based on a quasi-experimental design	not based on experimental or quasi-
	defined treatment and comparison	in which intervention and carefully	experimental design.
	groups with adequate sample sizes in	matched comparison groups are	
	each group, in which intervention and	constructed, with adequate sample	
	comparison groups are constructed by	sizes in each group.	
	randomly assigning some teachers to		
	participate in the project activities and		
	others to not participate.		
4b. Measurable evidence for impact	8 points	6 points	0 points
of project on student achievement and	Appropriate multiple measures (e.g.,	Appropriate state (if available) or	Summative or formative assessment
teacher effectiveness goals	NRT, CRT, classroom observations)	district measures (e.g., NRT, CRT,	procedures are not described and/or
	are used to show the impact of the	classroom observations) are used to	an analysis of results is inadequate.
	professional development on student	show the impact of the professional	
	achievement and teacher	development on student achievement	
	effectiveness. Description of both	and teacher effectiveness. Description	
	summative and formative assessment	of both summative and formative	
	procedures and an analysis of results	assessment procedures and an	
	are included.	analysis of results are included.	
4c. Contribution to research	4 points	3 points	0 points
	Evaluation plan clearly articulates	Evaluation plan clearly articulates	Evaluation plan inadequately
	how the activities will help the MSP	how the activities will help the MSP	articulates how the activities will help
	Program build a rigorous, cumulative,	Program build a rigorous, cumulative,	the MSP Program build a rigorous,
	reproducible, and usable body of	reproducible, and usable body of	cumulative, reproducible, or usable
	findings. Evidence provided indicates	findings.	body of findings.
	appropriate qualifications of the		
	organization or individuals		
responsible for executing the plan.			
*If one or more indicators in this section are scored "Below Standard," the grant proposal will be rejected.			

**5.** <u>Commitment and Capacity of Partnership:</u>
The project description must clearly demonstrate the submitting partnership has the capability of managing the project, organizing the work and meeting deadlines.

Criteria	Exceeds Standard	Meets Standard	Below Standard
5a. Partner's role in project	6 points	4 points	0 points
	Evidence is provided that clearly	Evidence is provided that outlines the	Little or no evidence is provided to
	describes each partner's role in the	role that each partner will play in the	indicate the role of one or more
	development, delivery, and evaluation	development, delivery, and evaluation	partners.
	of the proposed project.	of the proposed project.	
5b. Duties and responsibilities related	8 points	6 points	0 points
to the goals and objectives of the	Detailed description of the duties and	Outline of the duties and	Inadequate information on the duties
project	responsibilities and how they are	responsibilities and how they are	and responsibilities is provided.
	aligned to the goals and objectives of	aligned to the goals and objectives of	
	the proposal.	the proposal.	
5c. Capacity of partnership	6 points	4 points	0 points
	Evidence of the number and quality of	Evidence of the number and quality of	Explanation of capacity is inadequate
	staff to carry out the proposed	staff to carry out the proposed	and may be missing one or more of
	activities, a description of the	activities and a description of the	the criteria.
	institutional resources, and vitas for	institutional resources are not clearly	
	key partners' staff are provided.	detailed. Vitas are provided for key	
		partners' staff.	
5d. Partnership governance	4 points	3 points	0 points
	The partnership's governing structure	The partnership's governing structure	Inadequate information is provided
	specific to decision-making,	specific to decision-making,	related to partnership governance.
	communication, and fiscal	communication, and fiscal	
	responsibilities is well defined and	responsibilities is provided but not	
	related to goals and objectives and	specific.	
	project activities.		
5e. Sustainability	4 points	3 points	0 points
	There is a clear and specific plan for	Description of how the project will be	There is an inadequate plan for how
	project continuation. The plan	sustained and continue when state	the partnership will continue when the
	addresses the obstacles to future	funding is no longer available is	state funding is no longer available.
	funding, how assessment data will be	outlined in the plan. It is not clear	
	used, and how the project will be	how assessment data will be used or	
	promoted within the school and	how the project will be promoted	
	school districts.	within the school and school districts.	

## 6. Budget and Cost Effectiveness:\*

The budget justification should clearly be tied to the scope and requirements of the project. The budget narrative should describe the basis for determining the amounts shown on the project budget page. All proposals should include provisions for evaluation of the activities.

Criteria	Meets Standard	Below Standard
6a. Budget details	4 points	0 points
(In Narrative)	The proposal provides a general summary of budget	The proposal provides insufficient budget information
	outlining specific costs of each category over the	specific costs of each category over the duration (20
	duration (20 months) of the project and includes a	months) of the project; the proposal provides insufficient
	budget summary for each partner; the budgets support	information for each partner; or the budgets do not support
	the scope and requirements of the project.	the scope and requirements for the duration of the project.
6b. Cost effectiveness	6 points	0 points
(In Appendix, Narrative)	The amount included in each budget category is	The amount included in each budget category is not
	detailed and commensurate with the services or goods	commensurate with the services or goods proposed, or the
	proposed, and the overall cost of the project is	overall cost of the project is not appropriate for the
	appropriate for the professional development provided	professional development provided and the number of
	and the number of teachers served.	teachers served.
6c. Provisions for evaluation and	4 points	0 points
required meetings	The budget includes provisions for an evaluation, funds	The budget does not include adequate provisions for an
(In Appendix)	for key staff to participate in 2 state technical assistance	evaluation, funds for key staff to participate in 2 state
	meetings and 2 regional MSP meetings.	technical assistance meetings or 2 regional MSP meetings.

 $^*$ Up to 2 incentive points will be awarded if one or more partners provide additional funding for the project beyond that requested in the MSP proposal